POSADASIA PYRIFORMIS AND P. CAPSULATA, TWO CAUSATIVE ORGANISMS OF DARLING'S HISTOPLASMOSIS IN THE UNITED STATES[1]

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As far as the author could determine, there has been no satisfactory classification of the fungi responsible for the condition known as Darling's Histoplasmosis. This disease is characterized by an acute specific infection involving usually the epithelial and endothelial cells of the lungs, liver and spleen. The organism may also be free in these organs, as well as in the blood stream. The following are two organisms from such a condition.

Posadasia pyriformis Moore, n. sp.

In the host reproduction by single yeast-like cells. On artificial media, mycelium of septate, elongate or short, thick hyphae, 1–5 μ in diameter. Macroscopically, cultures cottony with aerial hyphae, hyaline and white in a mass to a dark Isabella in color, with a diameter of approximately 2–6 cm. on various media, after 43 days' growth. Microscopically, many conidia, lateral, sessile or pedicellate, spherical or pyriform, 3–8 μ in diameter; chlamydospores, intercalary 3–10 μ in diameter, singly or in chains and lateral on 1- to several-celled branches, or terminal 3–10 x 6–20 μ; racquet mycelium present; sexuality lacking; clavate or globose cells 5–18 μ in diameter, becoming multispored tuberculate asci, spherical 6–25 μ in diameter, usually 15 μ, and pyriform 6–12 x 12–26 μ, usually 10 x 22 μ. Tubercles up to 7 μ in long axis, varying in number and proportions. Carbohydrates not fermented. Milk not curdled or acidified. Gelatine not liquefied.

Posadasia pyriformis Moore, sp. nov.

Mycelium in culturis abundans sed in hospite cellulae singulae sunt. Hyphae longae vel breves, diametro 1–5 μ. Cul-

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turae floccosae aeriaeque, diametro 2–6 cm. diversis in mediis postquam 43 diebus. Conidia multa lateralia sessilia vel pedicellata, spherica vel piriformia, diametro 3–8 μ; chlamydosporae intercalarae lateralesve diametro 3–10 μ vel terminales 3–10 x 6–20 μ; mycelium "racquet" adest. Sexus deest. Cellulae clavatae vel globosae, diametro 5–18 μ, ascos multisporos tuberculatos fiunt, diametro 6–25 μ vel piriformes 6–12 x 12–26 μ. Tuberculi longi, 1–7 μ, numero et magnitudine diversi sunt. Gelatinum non fluidificans. Lac non concretum, acidus nullus. Fermentatio nulla.

Posadasia capsulata (Darling) Moore, n. comb.

Histoplasma capsulatum Darling, Jour. Am. Med. Assoc. 46: 1283–1285. 1906.

This species differs from *P. pyriformis* in having a slightly smaller growth on corresponding media and a light Isabella color. Microscopically the cells are smaller in proportion; hyphae 1–4 μ; conidia 2–7 μ; chlamydospores spherical, 3–8 μ in diameter, pyriform, 3–9 x 7–18 μ; clavate or globose cells 5–15 μ; asci multispored, spherical, only 5–22 μ, rarely 25 μ. Sexual development absent. Gelatine not liquefied. Milk not curdled or acidified. Carbohydrates not fermented.

Complete morphological, cultural, biochemical, and cytological details will follow.